Meeting Minutes: Klamath Network Vegetation Meeting and NPSpecies Workshop 6.25-27.2002

Location: Conference Room, Park Service Office
1125 16th Street, Arcata, CA 95521

In attendance:
Leonel Arguello
Andrea Williams
Sara Koenig
Michael Murray
Bob Truitt
Daniel Sarr
Kelly Fuhrmann
Jeff White
Scott
Mark Wotawa

Pre-Veg Meeting NPSpeciesWorkshop:

Mark Wotawa gave a Powerpoint talk on the NPSpecies Database and outlining the NPSpecies Certification Process

- Introduction to NPSpecies website, access, editing, queries
- Species documentation (references, vouchers, observations)
- Demonstration of report capabilities
- Database' ability to handle different synonyms
- Looked at mammal lists for several parks as a demonstration

Mark Wotawa provided guidelines for reviewing park vascular plant lists and presented handouts outlining definitions of specific values for NPSpecies fields as well as "cleanup filter definitions". He also outlined the elements of the certification process which will be refined and used nation-wide to help parks get their species lists into order. We spent considerable time discussing the approach and shared ideas for refinement of the process.

Participants downloaded latest information from NPSpecies provided by Mark Wotawa, reviewed lists for accuracy, and input information on four NPSpecies fields:
1) Park Status
2) Abundance
3) Nativity
4) Cultivation
5) Weediness
6) Preferred local name, when multiples synonyms exist

(See appendix 1 for further details on NPSpecies attribute fields)

We also discussed the distinction between the NPSpecies raw database and actual park working lists.
Mark Wotawa mentioned that very large quantities of records are being added to the national database frequently due to national level data mining efforts

Sara Koenig suggested that park botanists/plant ecologists would like opportunity to review new additions that might end up on park species lists.

Daniel Sarr mentioned that we need to inform park staff the filtering criteria to be applied when querying the national database for within park working lists.

Example: Park plant list= (1)Status → Present in park; (2)Preferred local list → yes; (3) Show list → species and below.

We noted that parks may want to keep track of non-native species that are not currently present in the park, but expected to be encroaching on the park. Could help target non-native species inventories.

Meeting Participants spent remaining time working on active lists. Most participants verified 100-200 records in first six hours and 300-400 records in ten hours. **All Parks agreed to complete review of lists and send for outside review by local experts, providing a certified list and the certification checklist (Appendix 2) to Bob Truitt to collate and forward to Mark Wotawa by 12/1/2002. This will be necessary for Whiskeytown as well. D. Sarr and B. Truitt offered to help as needed.**

Klamath Inventory Planning; Non-native and Rare Plant inventories

Issues and Topics

1:00-1:30 Sarr presented meeting goals and discussed issue related to the design of a generalized sampling framework for Network Non-native and rare plant inventories

Probabilistic sampling
Sampling frame across network parks
Hierarchical stratification scheme
Three tiered approach to biodiversity assessment (upland , aquatic, rare habitat surveys)

NON-NATIVE PLANTS
1:30-2:30 Parks presented activities, objectives, and concerns with regards to non-native plant inventories

Redwood NP

Non-native plant work has emphasized “special ecological areas” including several old growth redwood stands (Little Lost Creek, Ladybird Johnson Grove) and the Little Bald Hills area.

Chief areas of concern are:
Boundary areas
Grassy areas in southeast corner of park
Coastal strip
Riparian areas
Roadways
Disturbed areas
Hope to implement work by training existing staff (2 fulltime technicians)

Crater Lake NP

Seasonals have conducted preliminary inventories of:
Roads
Trailheads
Trails

Core interest areas include
Park Boundaries
Riparian sites

Interested in considering the approach used in LAVO (see below)

Lassen Volcanic NP

Calvin Ferris performed an analysis of non-native plants in LAVO using California Native Plant Society "matrix" to understand the ecology on non-native species in the park.
Currently Perform seasonal inventories
Approximately 500 acres are known to be infested
2 seasonals currently on staff, many basic needs covered
Chief concern and interest is with aquatic habitats, some overlap with rare, aquatic plant inventory needs

Lava Beds NM

Bernard has been in charge of weed control using non-native weed money
Approximately a half dozen species pose a problem at present
Currently a GIS layer of non-native plants for park
Boone Kauffmann (Oregon State) will be studying non-natives in park
Boundary areas are a concern

Oregon Cave NM

N/A

Whiskeytown NRA

N/A

Discussed a targeted inventory strategy for all parks which could be implemented with a two person field crew:
2 hour time constrained searches in focal areas
Roads, Trails
Aquatic / Riparian Environments
Park Boundaries
Most likely habitats (grasslands, burned areas)

Discussed ideas for additional funding for non-native plant inventories
Fire Effects Program
Cyclic Maintenance
Fee Demo
Foundations
Exotic Pest Plant Council CalEPPC
Natural Resource Conservation Service Range Program
Cooperative Interagency SWAT Teams
Cal & Oregon Native Plant Societies

AQUATIC AND RARE PLANT INVENTORIES

Park Specific Activities, Concerns

Redwood NP

Species of interest
Layia carnosa (only T & E plant)
14 CNPS listed species
Use the Rare Find2 (California Natural Diversity Database) Database
Target unique edaphic sites (serpentine)
Bald hills grassland and woodlands
Coastal sage scrub habitats

Will use existing staff to survey for
Crater Lake NP

Species of Interest: 6 Rare state listed or federal candidate species

Botrychium pumicola (Pumice grapefern)
Collomia mazama (Mt. Mazama collomia)
Arabis suffrutescens var horizontalis (Crater Lake rockcress)
Arnica viscosa (Sticky arnica)
Dicentra formosa ssp. oregana (Pacific bleeding heart)
Carex Whitneyi (Whitney's sedge)

Most occur in rocky upland areas
Targeted surveys desired

Lassen Volcanic NP

No federally listed, but 24 CNPS listed
6 Occur in alpine zones (they are covered)
Roughly 11 species occur in wetlands, so I & M activities should target wetland habitats
Sara had idea of a "Rare Plant-a-thon" getting local experts to spend 48 hours in the park (great idea !!) The event could be jointly sponsored by park and Klamath I & M Program

Lava Beds NM

High desert terrestrial species, no wetlands in park
Park list is compiled from a series of management and vegetation classification inventories
A rare plant list may need to be compiled

Oregon Caves NM
N/A
Whiskeytown NRA
N/A

Possible Funding Sources/Assistance for Rare Plant Inventories
California Native Plant Society
Local Chapters may provide volunteer help
Senior and Graduate student projects

Integration with Fire Program
No representatives from the NPS fire program were present, but we discussed active fire projects in several parks relevant to non-native and rare plant inventories the parks. The existing fire effects plots are relatively aggregated and focus on fuel loading issues and burning objectives. Control plots are also typically lacking. Probably not suitable to determine distribution and abundance of plants, but would provide some baseline information on non-native species distributions. We should continue working with fire people to perhaps do some joint planning in the future.

Action Steps
1) Review lists, send for outside review and send to Bob Truitt by Dec 1st.
1) Continue planning with individual parks through the fall to refine plant inventory plans for 2003.
2) Fly announcement for (2) GS-6 botany crew members by December, 2002.

Appendix 1 Key to Attribute Fields in NPSpecies

Species-Checklist Fields and Values in NPSpecies

CHECKLIST FIELDS

Park Status	Status of each species in each park.
Present in Park	Species' occurrence in park is documented and assumed to be extant.
Probably Present	Park is within species' range and contains appropriate habitat. Documented occurrences of the species in the adjoining region of the park give reason to suspect that it probably occurs within the park. The degree of probability may vary within this category, including species that range from common to rare.
Historic	Species' historical occurrence in the park is documented, but recent investigations indicate that the species is now probably absent.
Encroaching	The species is not documented in the park, but is documented as being adjacent to the park and has potential to occur in the park.
Unconfirmed	Included for the park based on weak ("unconfirmed record") or no evidence, giving minimal indication of the species' occurrence in the park.
False Report	Species previously reported to occur within the park, but current evidence indicates that the report was based on a misidentification, a taxonomic concept no longer accepted, or some other similar problem of interpretation.
Abundance	The current abundance of each species in each park. Park Status as above must be either "Present" or "Probably Present".
Abundant	Animals: May be seen daily, in suitable habitat and season, and counted in relatively large numbers. Plants: Large number of individuals; wide ecological amplitude or occurring in habitats covering a large portion of the park.
Common	Animals: May be seen daily, in suitable habitat and season, but not in large numbers. Plants: Large numbers of individuals predictably occurring in commonly encountered habitats but not those covering a large portion of the park.
Uncommon	Animals: Likely to be seen monthly in appropriate season/habitat. May be locally common. Plants: Few to moderate numbers of individuals; occurring either sporadically in commonly encountered habitats or in uncommon habitats.
Rare	Animals: Present, but usually seen only a few times each year. Plants: Few individuals, usually restricted to small areas of rare habitat.
Occasional	Occurs in the park at least once every few years, but not necessarily every year (applicable to animals only).
Unknown	Abundance unknown.
Residency	Current residency classification for each animal species in each park. Park Status as above must be either "Present" or "Probably Present".
Breeder	Population reproduces in the park.
Resident	A significant population is maintained in the park for more than two months each year, but it is not known to breed there.

Migratory	Migratory species that occurs in park approximately two months or less each year and does not breed there.
Vagrant	Park is outside of the species' usual range.
Unknown	Residency status in park is unknown.
Nativity	Nativity classification for each species in each park. Park Status as defined above must be either "Present" or "Probably Present".
Native	The species is native to the park (either endemic or indigenous), or if the Park Status is "Probably Present" as defined above, the species would be native to the park if it were eventually confirmed in the park.
Non-Native	The species is not native to the park (neither endemic nor indigenous), or if the Park Status is "Probably Present" as defined above, the species would not be native to the park if it were eventually confirmed in the park. Persistent plant populations (as defined below) that reproduce are also considered non-native.
Unknown	Nativity classification in park is unknown.
Cultivation	Cultivation classification (if applicable) for each non-native plant species in each park.
Cultivated	A non-native species that is currently cultivated in the park.
Persistent	A non-native species that persists in the park (either reproducing or non-reproducing) from a previous cultivation.
Details	Additional details for the respective field; for example if the values of a respective field does not offer a complete description or elaboration is desired.
Data Source	The source of the status, abundance, residency, nativity, cultivation, and/or weedy data. For data initially entered by the NPSpecies development/data team, the value will identify the data object (reference, digital file, etc.) submitted by the Park to the I&M office. Parks may update this field as individual records are updated or verified.

MANAGEMENT FIELDS

Weedy Plant?	Yes/No field for plant species only. Plant species are considered "weedy" or "invasive" if they (a) occur almost exclusively in disturbed habitats, (b) relatively recently occupied natural habitats in competition with native species, or (c) occur across a broad range of ecological conditions.
Pest	Yes/No field to identify whether a species is a “pest” in the park. "Pests are living organisms that interfere with the purposes or management objectives of a specific site within a park, or that jeopardize human health and safety." (NPS Management Policies 2001. Section 4.4.5.1)
Management Priority?	Yes/No flag to identify whether the species has management priority in the park.
Exploitation Concern	Yes/No flag to identify whether the species is an exploitation concern in the park.

OTHER FIELDS

Comments	General comments regarding this species in this park.
Entered By	Name of last person to enter or update the park-species record.
Entered Date	Date when park-species record was most recently updated.

Appendix 2 NPSpecies Certification Form

NPSpecies Certification

Enter the date of this certification:

Enter the complete names of the individuals that participated in this certification:

List the parks and circle the taxa categories that this certification applies to:

Park	Bird	Fish	Mammal	Amphib	Reptile	Vasc. Plants

Did any of the park boundaries that this certification applies to change since the last certification? If so, specify which parks:

Yes No Unknown

Was this certification done because a recent survey was done on any of the above taxa category(ies) in any of the above park(s)? If so, specify the park(s) and the taxa catgegory(ies):

Yes No Unknown

CERTIFICATION

It is understood that the following certification is based upon the current knowledge of the participants combined with the current information that was available while reviewing the NPSpecies database for certification.

Check the following items that are certified for the above taxa category(ies) in the above park(s):

Checklist Fields

____ **List Completeness:** The names on the list(s) include all the names that apply to the park regardless of the Park-Status. It is understood that by design, the list includes additional names due to taxonomic changes such as synonyms, lumping/splitting, etc. as a result of the inclusion of legacy data in the database.

____ **Local List:** The Local List checkbox has been checked for all appropriate names on the list, and has been reviewed for accuracy. It is understood that by design, the Local List checkbox identifies the names from the complete list above that are used locally to identify and reflect the actual physical entities in the park.

____ Park-Status: The Park-Status field has an entry for every name on the list and has been reviewed for accuracy.

____ Abundance: The Abundance field has an entry for every name on the list and has been reviewed for accuracy.

____ Residency: The Residency field has an entry for every vertebrate name on the list and has been reviewed for accuracy.

____ Nativity: The Nativity field has an entry for every name on the list and has been reviewed for accuracy.

____ Cultivation: The Cultivation field has an entry for every non-native plant on the list, and has been reviewed for accuracy.

Management Fields

____ **Weedy:** The Weedy checkbox has been checked for all appropriate names on the list, and has been reviewed for accuracy.

____ **Pest:** The Weedy checkbox has been checked for all appropriate names on the list, and has been reviewed for accuracy.

____ **Management Priority:** The Weedy checkbox has been checked for all appropriate names on the list, and has been reviewed for accuracy.

____ **Exploitation Concern:** The Weedy checkbox has been checked for all appropriate names on the list, and has been reviewed for accuracy.